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Faculteit Revalidatiewetenschappen

Master in de ergotherapeutische wetenschap

Masterthesis

Occupational balance among caregivers of children with disabilities or health care conditions: A scoping review study

Elke Meuleneire
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Scriptie ingediend tot het behalen van de graad van Master in de ergotherapeutische wetenschap

PROMOTOR :
Prof. dr. Barbara PISKUR

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BEGELEIDER :
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2024
2025

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Elke Meuleneire (2469460) & Merel Vandewalle (2468460)

Masterproef ingediend tot het verkrijgen van de graad van
Master of Science in de ergotherapeutische wetenschap

Promotor: Prof. Dr. Barbara Piskur
Begeleider(s): Dr. Marieke Coussens & Dr. Hazel Killeen
Academiejaar 2024-2025

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UNIVERSITEIT GENT

Abstract Nederlands

Achtergrond: Alle verzorgers ervaren uitdagingen in hun occupational balance (OB) door zorgtaken. Gezien de verhoogde eisen bij de zorg voor een kind met een beperking of een gezondheidsprobleem (BGP), zijn deze uitdagingen waarschijnlijk nog sterker aanwezig. Een beter begrip krijgen van de OB van deze verzorgers is essentieel voor het ontwikkelen van gezinsgerichte ergotherapeutische interventies die zowel de gezondheid en het welzijn van de verzorgers als van het kind ondersteunen.

Doelstellingen: Om grondig te onderzoeken hoe de BGP van kinderen de OB van hun verzorgers beïnvloeden en de belangrijke te korten in onderzoek te identificeren. De bevindingen zullen richting geven aan het ergotherapeutisch handelen en toekomstig onderzoek.

Methode: Deze scoping review volgde het raamwerk van Arksey en O'Malley. Relevante studies werden geïdentificeerd via een uitgebreide zoekactie in de wetenschappelijke databanken PubMed, Web of Science en Scopus. Peer-reviewed primaire studies die de OB van verzorgers van kinderen (0–18 jaar) met een BGP beschrijven, in het Engels geschreven zijn, en gepubliceerd zijn tussen 2012 en februari 2025, werden geïncludeerd. Gegevens werden geëxtraheerd en beoordeeld met behulp van JBI tools, gevolgd door conventionele contentanalyse om de bevindingen te synthetiseren.

Resultaten: In totaal werden 890 studies gevonden, waarvan er vijf voldeden aan de inclusiecriteria. Geïncludeerde studies suggereren dat verzorgers van kinderen met een BGP mogelijks een grotere impact op hun OB ervaren, beïnvloed door hun occupationele rollen, persoonlijke factoren en systeemfactoren.

Conclusie: Deze scoping review benadrukt de noodzaak aan meer kwalitatief en longitudinaal onderzoek naar verzorgers van kinderen met een BGP en aan conceptuele duidelijkheid rond OB. Daarnaast geeft het richtlijnen voor ergotherapeuten, waaronder het aannemen van een bredere en gezinsgerichte benadering, het gebruik van instrumenten zoals de OBQ-11 en het versterken van sociale steun.

Trefwoorden: Occupational balance, verzorgers, kind, beperking, gezondheidsprobleem, ergotherapie, scoping review

Aantal woorden in de masterproef: 5999 (exclusief samenvatting, inhoudsopgave, bijlagen en referenties), conform de richtlijnen van het Journal of Occupational Science.

Abstract English

Background: All caregivers experience challenges maintaining occupational balance (OB) due to caregiving responsibilities. Given the heightened demands of caring for a child with a disability or health care condition (DHCC), these challenges are likely to be more pronounced. A clearer understanding of these caregivers' OB is essential for developing family-centered occupational therapy (OT) interventions that support both caregiver and child health and well-being.

Objectives: To comprehensively examine how children's DHCC affect caregivers' OB and identify research gaps. The findings will guide OT practice and future research directions.

Method: The scoping review followed Arksey and O'Malley's framework. Relevant studies were identified by a comprehensive search in the scientific databases PubMed, Web of Science and Scopus. Peer-reviewed primary studies describing the OB of caregivers of children (0-18) with DHCC, written in English, and published between 2012 and February 2025 were included. Data were extracted and appraised using JBI tools, followed by conventional content analysis to synthesize the findings.

Results: A total of 890 articles were retrieved, with five meeting the criteria. These studies suggest that caregivers of children with DHCC may experience a greater impact on their OB, influenced by their occupational roles, personal factors and systemic factors.

Conclusion: This scoping review highlights the need for more qualitative and longitudinal research on the OB of caregivers of children with DHCC and conceptual clarity of the concept OB. It also provides recommendations for OTs to support caregivers' OB, including adopting a broader family-centered perspective, using tools like the OBQ-11 and fostering social support.

Keywords: Occupational balance, caregivers, child, disability, health care condition, occupational therapy, scoping review

Number of words in the master's thesis: 5999 (excluding abstract, table of contents, appendices, and references), in accordance with the guidelines of the Journal of Occupational Science.

Table of contents

List of abbreviations

Occupational Balance	OB
Occupational Therapists	OTs
Occupational Therapy	OT
Disabilities or Health Care Conditions	DHCC
Typically Developing Children	TDC
Very Low Birth Weight	VLBW
Person-Environment-Occupation model	PEO model
Joanna Briggs Institute	JBI
Autism Spectrum Disorder	ASD
Cerebral Palsy	CP

Foreword

With this master’s thesis, we aim to contribute a clinically relevant and scientifically grounded addition to the current body of knowledge on occupational balance. There is still much to be discovered about the impact of having a child with a disability or healthcare condition on the occupational balance of caregivers.

Both of us share a strong interest in children and everything surrounding this population. This interest originated during our internships in the bachelor's program. During these experiences, we noticed that there is often a lack of attention for the caregivers’ perspectives and needs within the care process. This realization strengthened our motivation to focus on caregivers and to contribute to a more holistic, family-centered approach. Since these internships, we have eagerly seized every opportunity to deepen our understanding of this specific group. For example, we attended several lectures at the European Occupational Therapy Congress in Krakow.

We hope this research marks the beginning of a more family-centered care approach and raises awareness of the importance of this perspective. We also hope it encourages further research into the experiences and needs of caregivers, leading to improved support structures and policy development.

This master’s thesis could not have been completed without the support and help of many people in our environment. First we would like to thank our supervisor Prof. Dr. Barbara Piskur, for her critical perspective and encouraging guidance. It has been an honour to work under your supervision. Thank you for giving us the time and space we needed to complete this work successfully.

We would also like to give special thanks to our co-supervisor Dr. Marieke Coussens, for always being available to support us and for thinking along with us throughout the direction of this research. Your trust and support during this process have been invaluable. You often believed more in our abilities than we did ourselves, and through that, we learned that we are capable of more than we sometimes think. Thank you for everything you have meant to us.

In addition, we would like to thank our advisor Dr. Hazel Killeen from Ireland, for your contribution to this thesis. Your valuable insights and expertise elevated this work to a higher level. This collaboration motivated us to write this thesis in English, a decision that has taught us a lot.

Lastly, we want to sincerely thank our personal network. Thank you to our (in-law) parents, friends, and family members for always being there for us, offering moments of rest and distraction when we needed them. We also want to express our heartfelt thanks to our partners, Simon and Matthias, for proofreading our texts and encouraging us throughout this entire journey.

We hope to inspire and spark curiosity with this thesis,

Elke Meuleneire and Merel Vandewalle
Ghent, May 2025

Context

Becoming a caregiver for a child is a major life change that brings many new responsibilities, which can influence the self-perceived mental well-being of caregivers (Wada et al., 2014; Wagman & Håkansson, 2014). It's challenging to manage these new responsibilities and maintain an occupational balance (OB), with mothers experiencing the greatest difficulty (Uthede et al., 2023). OB is an individual's subjective experience of having the right amount and variety of occupations, encompassing both paid and unpaid activities (Wagman et al., 2012).

Given that caregivers of children without disabilities or health care conditions (DHCC) already experience difficulties to maintain their OB, it can be assumed that this impact is even more pronounced for caregivers of children with DHCC due to the high demands of the caregiving role related to the child's condition (McGuire et al., 2004).

Currently, the impact on the OB of these caregivers with a child with a DHCC remains unclear due to the lack of individual studies and a comprehensive overview. Consequently, the topic of OB in caregivers of children with DHCC was assigned to us by our co-supervisor Dr. Marieke Coussens from University of Ghent. In collaboration the decision was made to adopt a scoping review design. Together, we decided to focus on the following research question in this study: "What insights does the literature provide on the impact of children with DHCC on caregivers' OB?".

The results of this study may help identify research gaps and offer suggestions for future research. Furthermore, this research can inform the development of recommendations for occupational therapy (OT) interventions at assisting caregivers of children with DHCC. It's crucial for occupational therapists (OTs) to adopt a family-centered care approach, ensuring that therapy extends beyond the child (Gafni-Lachter & Ben-Sasson, 2022). Assisting caregivers in managing their OB is vital, as research shows a positive correlation between OB, health and overall well-being (Bejerholm, 2010; Forhan & Backman, 2010; Håkansson et al., 2009; Håkansson et al., 2011; Wagman & Håkansson, 2014; Wagman et al., 2020; Yu et al., 2018). The OB experienced by caregivers can also impact the health of those they care for (Hodgetts et al., 2014). Moreover, this scoping review can contribute to increasing awareness, among both the immediate environment (such as family and friends) and the broader environment (including colleagues, the community and policymakers), about the impact on caregiver’s OB when raising a child with a DHCC.

This master's thesis is situated within the research domain of occupational science, as the concept of OB serves as a core concept within this field. Occupational science systematically studies human occupations and their relationship with health and well-being (Clark et al., 1991; Yerxa, 1990). This thesis is a standalone study and isn’t part of an ongoing or upcoming project. It was written by two master's students in Occupational Sciences. Both students were equally responsible for all phases of the research process. Each component of the thesis was completed collaboratively, with equal contributions from both students. This included conducting the literature search for the introduction, formulating the research problem, developing the search strategy, executing the study selection process, analysing the selected studies, and writing down the method, results, discussion and conclusion.

There was an international collaboration with Dr. Hazel Killeen from University of Galway in Ireland and Prof. Dr. Barbara Piskur from University Hasselt, REVAL research group and Zuyd University of Applied Sciences in the Netherlands. They contributed by supporting the development of a consensus regarding the appropriate search strategy, the selection of studies and the analysis technique, including the corresponding data analysis. They are both familiar with the subject and the study design.

Introduction

Occupational balance (OB) is an individual’s subjective experience of having the right amount and variety of occupations, encompassing both paid and unpaid activities (Wagman et al., 2012). It’s a core concept in occupational science, which systematically studies human occupations and their relationship with health and well-being (Clark et al., 1991; Yerxa, 1990). Occupation refers to a unique and unpredictable activity that establishes personal identity and meaning (Van de Velde, 2015). Any change in engagement with these activities alters an individual's OB (Dür et al., 2015). Several studies found a positive correlation between OB and health and well-being (Bejerholm, 2010; Forhan & Backman, 2010; Håkansson et al., 2009; Håkansson et al., 2011; Wagman & Håkansson, 2014; Wagman et al., 2020; Yu et al., 2018), suggesting that promoting OB could be an effective way to improve overall quality of life (Wagman & Håkansson, 2014).

OB can be influenced by several factors, such as age, gender, employment status and parental status (Håkansson & Ahlborg, 2018). Parenting children makes it challenging for caregivers to manage responsibilities and maintain their OB (Uthede et al., 2023). Mothers often experience a greater impact, while older caregivers (≥ 38 years) report a lower OB compared to younger caregivers (Uthede et al., 2023).

Since maintaining OB is already challenging for caregivers of typically developing children (TDC), it can be assumed that this challenge is even more pronounced for caregivers of children with disabilities or health care conditions (DHCC) due to the high demands of the caregiving role related to the child’s condition (McGuire et al., 2004). A study from Luijkx et al., (2017) showed that caregivers of children with disabilities have an average of 1.5 hours less free time per day compared to caregivers of children without disabilities. It’s estimated that worldwide, 240 million children have some form of disability (UNICEF, 2021). Many of these caregivers may therefore experience an impact on their OB that may require support.

Unfortunately, there is limited research available on this topic. A scoping review by Wagman et al. in 2015 on the current research of OB indicates that only one study specifically addresses OB in caregivers of children with DHCC, namely the study by Hodgetts et al. (2014) on the impact of autism services on mothers’ OB and participation.

A comprehensive overview of OB among caregivers of children with DHCC is currently lacking. This examination is crucial for occupational therapists (OTs), as it informs the development of family-centered practices and interventions tailored to caregivers' specific needs. Family-centered care emphasizes collaboration with families to enhance their roles in daily activities and provide holistic support (Gafni-Lachter & Ben-Sasson, 2022). This is important, as the health and well-being of caregivers are linked to the health and well-being of their children (Apter et al., 2017; Davis et al., 2003; Mackley et al., 2010). The OB experienced by caregivers can impact both their own health and the health of those they care for (Hodgetts et al., 2014). Another study by Lee et al. (2012) demonstrated the link between mothers' occupations and the health of their children. Also OT models, such as the Person-Environment-Occupation (PEO) model, underscore the importance of adopting a holistic perspective that considers not only the person but also the environment. Occupational performance is shaped by the dynamic interaction between the person, their occupations and the environment (Law et al., 1996).

The aim of this study is to provide an overview of the impact of children’s DHCC on caregivers' OB and to identify potential research gaps. These insights can aid in developing recommendations for OT interventions that assist caregivers of children with DHCC. These insights can also guide the formulation of research proposals.

Method

Design

Given the objective of providing an overview of existing research about OB by caregivers of children with DHCC and identifying potential research gaps, a scoping review was the most appropriate methodology (Arksey & O'Malley, 2005). The scoping review was guided by the Joanna Briggs Institute (JBI) Reviewers guidelines (The Joanna Briggs Institute, 2015) and the PRISMA-ScR checklist (Tricco et al., 2018). This study followed the five steps of the scoping review methodology: 1) formulating the research question, 2) identifying relevant studies, 3) study selection, 4) charting the data and 5) synthesizing and summarizing the results (Arksey & O'Malley, 2005).

The first step involved formulating the research question: "What insights does the literature provide on the impact of children with DHCC on caregivers' OB?".

Identification of relevant studies

In step two, relevant studies were systematically identified by searching for relevant keywords (Table 1 and Appendix 1 for a detailed overview). These keywords were then transformed into search strings (Appendix 2) and entered into the databases PubMed, Web of science and Scopus. The searches were conducted up to 26 February 2025.

Table 1: Terms used for the systematic search strategy

Population AND	Exposure AND	Outcome
Caregiver OR parent OR father OR mother	Child OR disabled child AND Disability OR disorder OR health care condition	Occupational balance

In line with the third step of the methodology, inclusion criteria were established to determine which studies would be part of the review. No articles were excluded based on research methods, both qualitative, quantitative and mixed-method studies were included (Arksey & O'Malley, 2005;

The Joanna Briggs Institute, 2015). However, review articles were excluded to ensure a focus on original research and primary data sources. The criteria for inclusion were:

- written in English
- published in January 2012 or later, starting from the publication of the concept analysis on OB within OT by Wagman, P., Håkansson, C., & Björklund, A. in 2012.
- full articles reporting primary research
- population: caregivers of children with DHCC
- age child: 0-18 years old
- outcome: occupational balance

The process of data collection was conducted in three steps: 1) removing duplicates 2) screening on title and abstract and 3) screening on full text. Two independent reviewers performed this process using the software program Rayyan. Three experienced researchers supported the process of reaching a consensus, so five researchers agreed on the inclusion and exclusion of final studies in this scoping review.

In step four, the data was organized into a form (Appendix 3) that included both general and specific information (Arksey & O'Malley, 2005). This format was used to present the findings of the review, such as the first author, publication year, the number of participants, their gender, the country where the research was conducted, the study design, the research aim, the outcome(s) and the results that contributed to answer the research question. An overview of the excluded studies, along with the corresponding reasons, was also created (Appendix 4). A quality check of the included literature was conducted. Depending on the used method in a study, a different critical appraisal tool was chosen from JBI (Appendix 5-9).

Analysis of the content: conventional content analysis

In the final step, the findings were synthesized and summarized through conventional content analysis (Hsieh & Shannon, 2005), selected as the most suitable method due to the quantitative nature of all five cross-sectional studies. Two researchers reviewed the selected articles, with attention to the results, noting comments, codes and labels on the influence of having a child with a DHCC on the OB of caregivers. Discussion of each other's comments together with another neutral researcher led to an initial joint list of codes and labels. Based on these codes, the papers were re-examined and fragments were recoded to achieve a shared understanding of the data. In the last consensus round with the two head researchers and three neutral researchers, themes representing the influence of having children with DHCC on the OB of caregivers were identified, including the researchers’ interpretation of the data.

Results

Included & excluded studies

The search provided 1735 results in total. After removal of duplicates, 890 results remained. After the review of titles and abstracts, 859 records were excluded. After reading the remaining 31 full texts, five studies met the inclusion criteria and were included in the analysis. The main reason for exclusion of the other 26 studies was an incorrect outcome (85%), due to a lack of connection with OB or a predominant focus on psychological aspects such as well-being, stress, depression and burn-out. The remaining exclusions were due to an incorrect population (15%), specifically studies involving caregivers of children over the age of eighteen or those focusing more on the family unit rather than the caregivers themselves. An overview of the excluded studies, including the rationale for their exclusion, is presented in Appendix 4. Further details of the study selection can be consulted in the PRISMA flow chart (Figure 1).

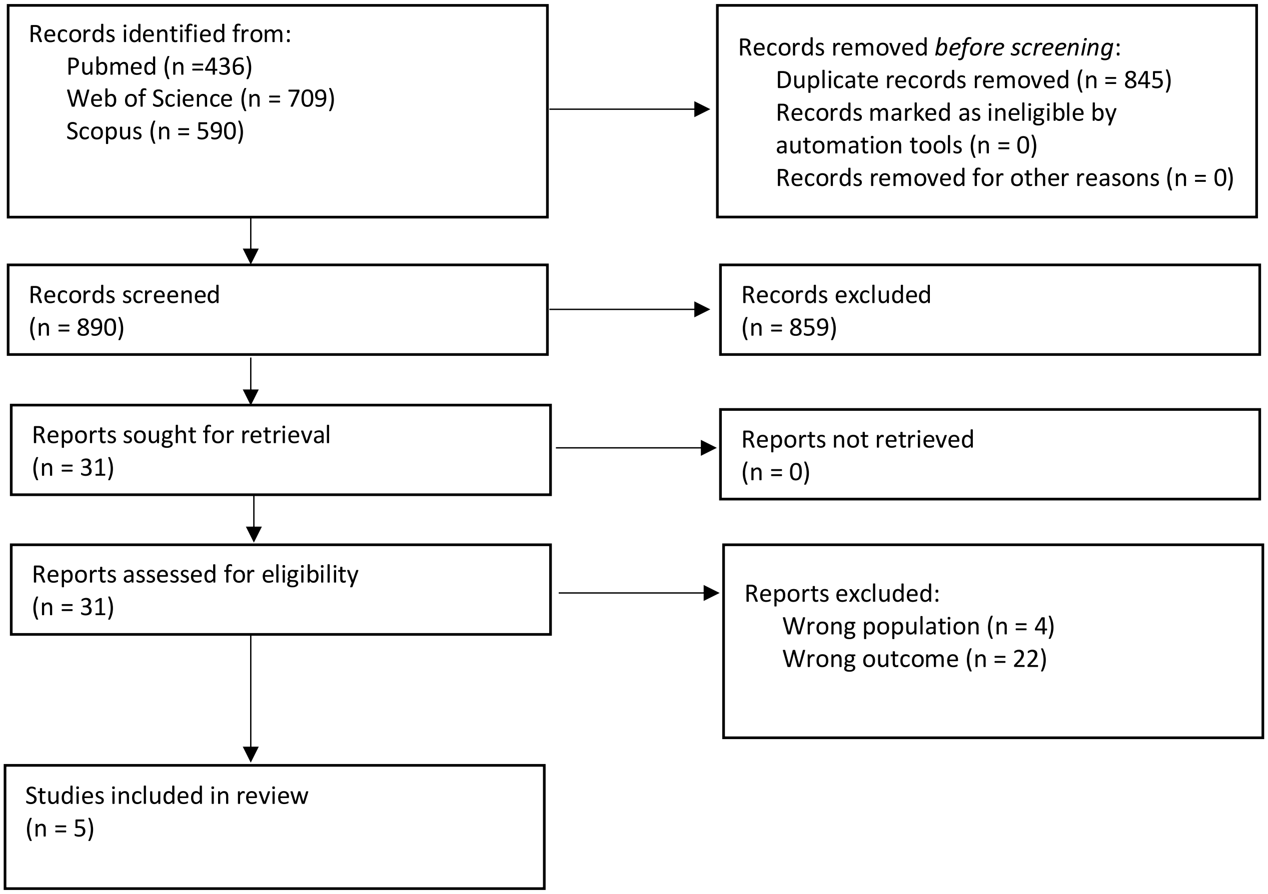

Figure 1: PRISMA flow chart

Descriptive summary of the studies

Five studies (Dhas, 2023; Dür et al., 2022; Günal et al., 2021; Kars et al., 2024; Yazici & Yildirim, 2025) published between 2012 and 2025 were finally selected. These were studies from Turkey (N =3), Qatar (N = 1) and Austria (N = 1). All the studies were cross-sectional (N = 5). The JBI critical appraisal tools (Appendix 5, 6, 7, 8, 9) indicated that the methodological quality of the studies ranged from moderate to good, supporting the decision to include all these studies. Five studies were identified: two examining caregivers of children with Autism Spectrum Disorder (ASD) (Kars et al., 2024; Yazici & Yildirim, 2025), one focusing on caregivers of children with Cerebral Palsy (CP) (Günal et al., 2021), one on caregivers of Very Low Birth Weight (VLBW) infants (Dür et al., 2022), and one taking a broader perspective on caregivers of children with various disabilities (Dhas, 2023). One study focusses specifically on mothers of children with disabilities (Günal et al., 2021), and in the remaining studies, mothers also represent the majority of participants.

Table 2: Demografic characteristics of caregivers

First author & year	Number of participants	Country	Age range caregivers	Age range children	Employment status
Günal et al., 2021	33 mothers of children with CP and 36 mothers of Typically Developing Children (TDC).	Turkey	- Mean age mothers of children with CP: 34.52 → 29.23 – 39.81 - Mean age mothers of TDC: 36.52 → 32.29 – 40.75	- Mean age children with CP: 7.23 → 3.13 – 11.33 - Mean age TDC: 8.45 → 4.25 – 12.65	- Mothers of children with CP: 6 employed & 30 unemployed - Mothers of TDC: 7 employed & 29 unemployed
Dhas et al., 2023	- 89 caregivers of children with disabilities	Qatar	<30 - >40	Mean age: 4.5 years → 2.03 – 6.97 years	- Caregivers of children with disabilities: 65

	(PCWD): 41 men & 48 women - 89 caregivers of TDC: 34 men & 55 women				employed & 24 unemployed -Caregivers of TDC: 61 employed & 28 unemployed
Dür et al., 2022	- Six Austrian neonatal intensive care units - 270 caregivers: 168 female & 102 male	Austria	Mean age caregivers: 33.7 years → 27.3 – 41.4 years	The mean age: 27 weeks and 3 days → 25 weeks and 3 days – 29 weeks and 3 days	- Student: 5 - Parental leave: 156 - Self-employed: 26 - Employed: 87 - Unemployed: 5 - Not specified: 5
Yazici & Yildirim, 2025	280 participants: - 140 caregivers of children with autism: 28 men & 112 women - 140 caregivers of TDC: 34 men & 106 women	Turkey	- Mean age caregivers of children with autism: 31.87 → 28.94 – 37.26 - Mean age caregivers of TDC: 33.10 → 27.31 – 36.43	Mean age: 7.12 years → 5.87 – 8.37 years	- Caregivers of children with autism: 45 employed & 95 unemployed - Caregivers of TDC: 56 employed & 84 unemployed
Kars et al., 2024	138 caregivers (115 women & 23 men), with pre-school aged children with autism enrolled in a rehabilitation program	Turkey	Mean age caregivers: 34.42 → 22 – 62	Mean age: 35.17 months → 24 – 71 months	- Employed full time: 91 - Unemployed: 47

Narrative summary of the studies

The five studies highlighted that caregivers of children with DHCC scored significantly lower compared to caregivers of TDC, or experienced an impact on their OB.

Three studies (Dhas, 2023; Günal et al., 2021; Yazici & Yildirim, 2025) compared the OB, by using the occupational balance questionnaire 11 (OBQ11), between caregivers of children with and without DHCC. Caregivers of children with DHCC report significantly lower levels of OB compared to caregivers of TDC. For instance, Günal et al. (2021) reported that mothers of children with CP scored significantly lower on OB ($p < 0.05$). Likewise, Yazici and Yildirim (2025) indicated a significant lower OB ($p < 0.001$) for caregivers of children with autism. Similarly, Dhas et al. (2023) reported a significant lower OB for caregivers of children with disabilities, with a medium effect size (Cohen's $d = 0.36$).

Even in the two studies (Dür et al., 2022; Kars et al., 2024) that didn't compare with caregivers of TDC, caregivers of children with DHCC reported limitations in their OB. In the study by Kars et al. (2024), caregivers of children with autism had a mean OB score of 1.46 on the Turkish Occupational Balance Questionnaire (OBQ-T), indicating disagreement with a high level of OB, as this score falls within the average range of 0.76 to 1.50. Similarly, Dür et al. (2022) suggested, with the Occupational Balance in Informal Caregivers (OBI-Care) questionnaire, that caregivers of very low birth weight (VLBW) infants reported restrictions in their OB, with mean scores of 25 for occupational areas, 18 for occupational characteristics and 14 for occupational resilience.

After analysing the data from the included studies using conventional content analysis, three key factors that may influence the OB of caregivers of children with DHCC were identified: the personal factors of the caregiver, their occupational roles and system factors.

An overview of the themes, along with their corresponding labels and codes, is presented in Figure 2.

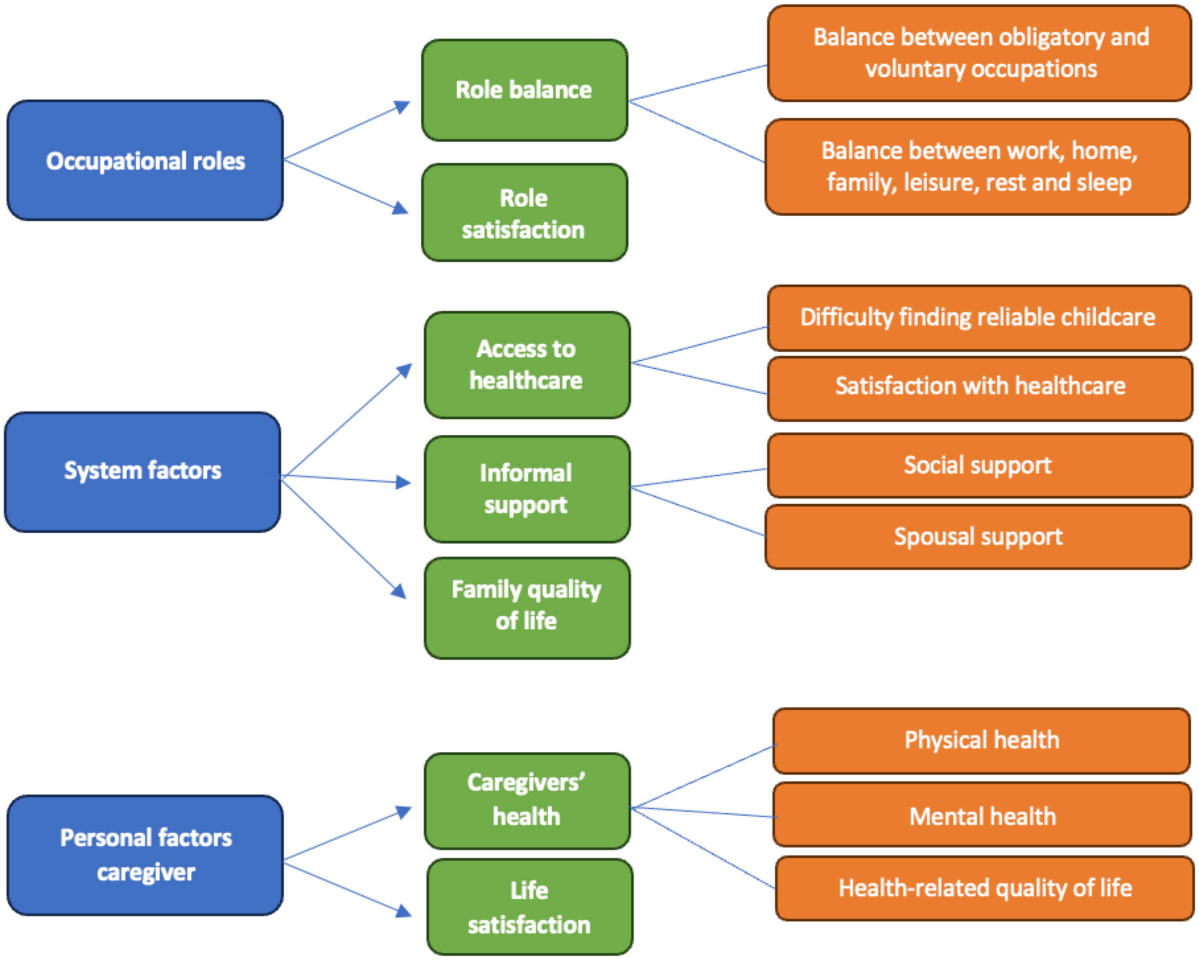

Figure 2: Conventional content analysis

Theme 1: Occupational roles

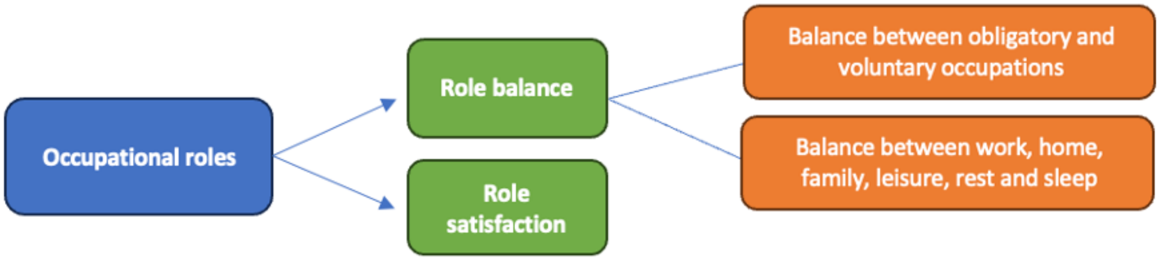

Figure 3: Occupational roles

The first factor that may influence the OB of caregivers of children with DHCC are their occupational roles. Specifically, the balance between their roles and their role satisfaction impact their OB.

Role balance

The studies by Günal et al. (2021) and Yazici & Yildirim (2025) reported not only the total scores of the OBQ11 but also the individual item scores. Both studies reported that mothers of children with CP ($p<0.05$) and caregivers of children with autism ($p = 0.002$) scored significantly lower on item 9 ("There is enough variation between things that I must do and things that I want to do") of the OBQ11 compared to caregivers of TDC. This indicates difficulties in balancing voluntary and obligatory occupations. Moreover, Yazici & Yildirim (2025) emphasized that caregivers of children with autism also scored significantly lower ($p = 0.005$) on item 4 in relation to balancing work, home, family, leisure, rest and sleep. Achieving balance across these items contributes to the total OBQ11 score and, therefore, shapes how caregivers of children with DHCC experience their OB.

Role satisfaction

The study from Dhas et al. (2023) reported that role satisfaction is a significant ($p<0.05$) predictor for the OB of caregivers of children with or without DHCC. This predictor is assessed by using a 7-point Likert scale ranging from not at all to very much on the eight predetermined roles from the Role Checklist, such as worker, caregiver, home maintainer and friend. Percentage score for each role and a total role satisfaction score was calculated by the average of the individual scores for each role.

Theme 2: System factors

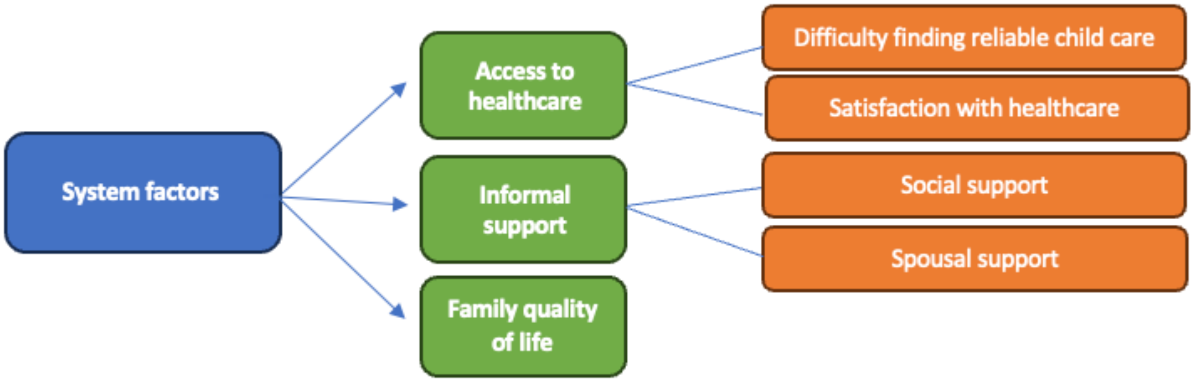

Figure 4: System factors

The second factor that may influence the OB of caregivers of children with DHCC are system factors. Specifically, the access to healthcare, informal support and family quality of life impact their OB.

Access to healthcare

The study from Dhas et al. (2023) examined predictor factors for OB among caregivers of children with and without DHCC. Their findings highlighted two healthcare-related factors as significant predictors ($p < 0.05$): (1) difficulty in finding reliable childcare and (2) satisfaction with healthcare services. These two factors were assessed using a 5-point Lickert scale with the statements: “It was hard to find a reliable person to take care of my child” and “Overall, how satisfied were you with the quality of care received from health and rehabilitation services in Qatar?”.

Informal support

In the study by Dür et al. (2022), the OB of caregivers of VLBW infants was significantly associated with social support, as measured by the OBI-Care questionnaire. All three subscales - occupational areas ($p \leq 0.01$), occupational characteristics ($p \leq 0.01$), and occupational resilience ($p \leq 0.01$) - showed weak but statistically significant inverse correlations. These inverse relationships suggest that lower scores on the OBI-Care, which reflect higher satisfaction with OB, were associated with higher levels of perceived social support.

In addition, Kars et al. (2024) explored perceived social support among caregivers of school aged children with autism using the Multidimensional Scale of Perceived Social Support. The perceived social support by the caregivers was at the level of ‘mildly agree’ for all domains (family, friend and significant other). Furthermore, a strong and statistically significant positive correlation was found between perceived social support and OB ($p < 0.01$), suggesting that higher levels of perceived social support are associated with more favourable experiences of OB among caregivers.

The study from Dhas et al. (2023) found also that spousal support is a significant ($p<0.05$) predictor for the OB of caregivers of children with and without DHCC. This predictor is assessed by using a 5-point Lickert scale using the statement: “Please rate the helpfulness of your partner” ranging from not at all helpful to extremely helpful.

Family quality of life

The study by Dhas et al. (2023) explored the relationship between OB and family quality of life among caregivers of children with and without DHCC. A statistically significant moderate correlation was found between the OBQ11 and the total scores on the Family Quality of Life Survey–2006 short version (FQOL–2006) *, as well as between the OBQ11 and the global FQOL–2006 scores (p = .001) for caregivers of children with DHCC. Similarly, for caregivers of TDC, significant correlations were observed between OBQ11 scores and both the total (p = .001) and global FQOL–2006 scores (p = .003). These findings suggest that a better experienced OB is associated with a higher perceived quality of family life, regardless of the child's developmental status.

** The FQOL–2006 has nine domains: Health of the Family, Financial Well-Being, Family Relationships, Support From Other People, Support From Disability-Related Services, Influence of Values, Careers and Preparing for Careers, Leisure and Recre- ation, and Community Interaction. Each domain is measured by six dimensions: Importance, Opportuni- ties, Initiatives, Attainment, Stability, and Satisfaction. Only Attainment and Satisfaction are considered out- come dimensions that measure, respectively, the degree to which the family is able to accomplish their needs and the family’s overall perception of satisfaction in the aspect of family life pertaining to the domain. These dimensions are measured on a 5-point ordinal scale ranging from lowest (1) to highest (5) (Dhas et al., 2023). Full version:* *https://www.surreyplace.ca/documents/FQLS%20Files/FQOLS-2006%20ID%20DD%20Version%20Aug%2009.pdf*

Theme 3: Personal factors caregiver

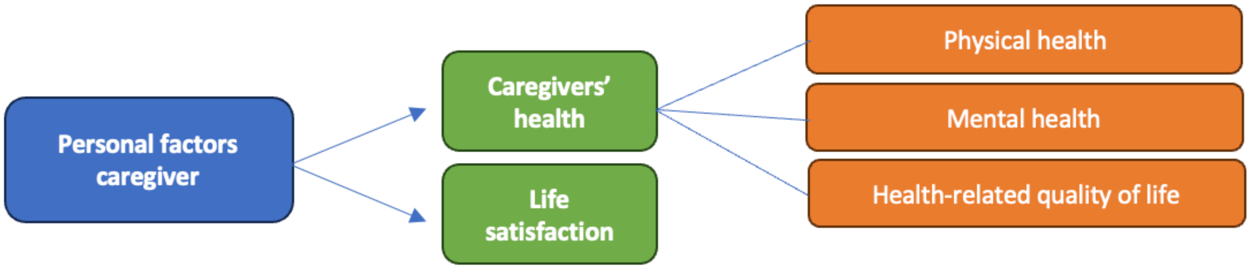

Figure 5: Personal factors caregiver

The third factor that may influence the OB of caregivers of children with DHCC is the caregiver’s personal factors. Specifically, the caregiver’s health and life satisfaction impact their OB.

Caregivers’ health

The study by Dür et al. (2022) examined how OB relates to both physical and mental health in caregivers of VLBW infants. Weak inverse correlations were found between physical health, measured with the 12-item version of the short-form 36 health survey (SF-12), and two subscales of the OBI-Care: occupational areas (p = 0.02) and occupational characteristics (p = 0.04). These findings indicated that lower scores on the OBI-Care (reflecting higher satisfaction with OB) are associated with better physical health (fewer restrictions).

The same study reported moderate inverse correlations between all dimensions of OB and mental health. Occupational areas ($p \leq 0.01$), occupational characteristics ($p \leq 0.01$), and occupational resilience ($p \leq 0.01$) were all inversely associated with the SF-12 mental health subscale, indicating that higher satisfaction with OB is related to higher mental well-being.

In addition, all three OB subscales in the OBI-Care showed significant associations with postnatal depression, as measured by the Edinburgh Postnatal Depression Scale (EPDS). Moderate positive correlations were found with occupational areas ($p \leq 0.01$), occupational characteristics ($p \leq 0.01$), and occupational resilience ($p \leq 0.01$). Since lower scores on both OBI-Care and EPDS indicate more favourable outcomes, these results suggest that a higher OB is associated with fewer depressive symptoms.

Furthermore, all dimensions of OB showed moderate correlations with both dimensions of anxiety. Occupational areas, occupational characteristics, and occupational resilience ($p \leq 0.01$ for all) were significantly associated with state anxiety as well as with trait anxiety, as measured by the State-Trait Anxiety Inventory (STAI). This indicates that lower OBI-Care scores (high satisfaction) were related to lower STAI scores (less anxiety).

Moreover, all subscales of OB were associated with stress. Weak correlations were found between OB and bonding, while moderate correlations emerged with health, isolation, and personal restriction ($p \leq 0.01$ for all) as assessed by the Parental Stress Index (EBI). These findings demonstrate that caregivers who experience greater satisfaction with their OB also report fewer feelings of stress across multiple domains.

Another study by Günal et al. (2021) also explored the relationship between OB and health-related quality of life. Among mothers of children with CP, weak to moderate negative correlations were found between the OBQ11 scores and all subscales (pain, emotional reactions, energy level, social isolation, and sleep) of the Nottingham Health Profile (NHP), except for physical mobility ($p > 0.05$). These findings highlight the association between higher OB and fewer perceived health problems in areas such as emotional well-being, fatigue, social connectedness, sleep quality and pain. Thus, a high OB combined with low NHP scores may reflect better perceived health and a higher overall quality of life.

Life satisfaction

The study by Yazici and Yildirim (2025) examined the relationship between OB and life satisfaction among caregivers of children with autism. Using the Spearman correlation test, a strong positive correlation ($p < 0.001$) was found between the OBQ11-T and the total scores on the Contentment With Life Scale (CLAS). This finding suggests that higher levels of OB are associated with greater life satisfaction. Furthermore, caregivers of children with autism reported significantly lower scores on both the OBQ11-T and CLAS compared to caregivers of TDC ($p < .001$), highlighting the impact of caregiving demands on both OB and life satisfaction.

Discussion

Discussion of the findings

This scoping review focused on three main objectives. The first aim was to summarize what is known in the literature about the impact of children's DHCC on caregivers' OB. The second aim was to identify gaps in existing research. The third aim was to provide recommendations for OT interventions, based on existing research, that assist caregivers of children with DHCC. The outcomes of each achieved objective are discussed below.

Impact of children's disabilities and health care conditions on caregivers' OB

The analysis of the data revealed that OB is a complex phenomenon, which aligns with findings previously highlighted by a scoping review from Wagman & Håkansson (2019) and a study from Liu et al. (2023). However, with this study, we were able to clarify some aspects regarding OB. This review is, to our current knowledge, also one of the first to explore the factors that influence the OB of caregivers of children with DHCC. This section provides an overview of the results, their connection to the PEO model and their consistency with existing literature.

The analyses of included studies of this scoping review suggest that caregivers of children with DHCC may experience an impact on their OB, scoring significantly lower compared to caregivers of TDC. The conventional content analysis of the included studies identified three major themes that help explain the influencing factors on the OB of caregivers of children with DHCC. First, caregivers' occupational roles, including role balance and role satisfaction, may influence their OB. Second, system factors, such as access to healthcare, informal support and family quality of life, may affects caregivers' OB. Third, caregivers' personal factors, including health and life satisfaction, may also play a role in shaping their OB.

These three themes demonstrate a clear connection with the Person-Environment-Occupation (PEO) model (Law et al., 1996). The personal factors of the caregiver aligns with the 'Person' domain of the PEO model, occupational roles correspond to the 'Occupation' domain, and system factors are situated within the 'Environment' domain. In the PEO model is the dynamic interaction between these elements crucial for supporting occupational performance, but in this case, the dynamic interaction between the three themes is essential for achieving OB.

The findings are also consistent with previous research about OB that extends beyond caregivers of children with DHCC. Numerous studies have highlighted that the personal factors, specifically the health and life satisfaction, of specific populations such as adults with schizophrenia, rheumatoid arthritis and stress-related disorders, influence their OB (Bejerholm, 2010; Forhan & Backman, 2010; Håkansson et al., 2009, 2011, 2019; Wagman et al., 2020; Wagman & Håkansson, 2014; Yu et al., 2018).

Furthermore, there are studies that indicate that OB is related to occupational roles. A study from Yazdani et al. (2018) has highlighted that OB is related to occupational roles and the balance between activities that individuals want to do and those they are required to do. This study, exploring OTs perceptions of OB, emphasized that participation can be purposeful without necessarily being meaningful in fulfilling responsibilities and occupational roles. These results are consistent with Park et al. (2021) who highlighted the relationship between OB and role value in older people in South Korea.

Moreover, the literature indicates that systemic factors can influence OB. A scoping review by Wagman & Håkansson, 2019 highlighted the positive impact of support on OB. For example, a study from Hodgetts et al. (2014) suggested that discontinuity of autism services by mothers of children with autism is a predictor for occupational imbalance.

Research gaps

After conducting this study, two important research gaps were identified: 1) there is a clear need for more research and 2) conceptual clarity is required regarding the term OB by caregivers of children. Each of these will be further explained in the paragraphs below.

Firstly, more in-depth qualitative and longitudinal studies are needed to explore caregivers' experiences, coping strategies and daily challenges to inform more tailored support and interventions. This scoping review is purely based on cross-sectional studies. While these provide data at a single point in time, they offer limited insights into the evolving and complex experiences of caregivers. The absence of qualitative studies limits the understanding of how OB is influenced by various personal and contextual factors. The absence of longitudinal research restricts the understanding of how caregivers' OB may change over time in response to factors such as the child's age, the complexity of the DHCC, and the caregiver's ability for occupational adaptation.

Another important finding is the limited number of studies focusing specifically on the OB of caregivers of children with disabilities. In this scoping review, developing an effective search strategy was challenging due to the limited number of studies on OB. Broadening the search with terms, like quality of life, resulted in many irrelevant studies that lacked a clear link to OB. The concept of OB is mainly used within the field of occupational therapy, which may limit its applicability and recognition in broader interdisciplinary research. While studies from other domains such as psychology or sociology often address similar ideas, such as work-family balance, life satisfaction and time use, these constructs don't always use the same terminology or conceptual framework. This suggests a need to reconsider the definition of OB to better reflect and align with related constructs used in other disciplines. Importantly, it should also incorporate a more family-centered perspective, acknowledging the interconnected experiences of caregivers and their families. It could enhance interdisciplinary collaboration and make the concept more accessible across research domains, potentially leading to more studies. However, this broader approach carries the risk of blurring the unique perspective and theoretical foundation that occupational therapy brings, potentially weakening its professional identity and distinct contribution.

Recommendations

Although OTs consider the family within the context of the child's care, the findings suggest that it's valuable for them to adopt a broader, multi-level approach. One that not only focuses on the child, but also takes into account the wider context in which the child develops, in line with the principles of the PEO model (Law et al., 1996).

As part of family-centred practice, OTs could consider involving caregivers in a multi-level approach, by assessing the caregivers' OB and addressing related challenges. The most common tool to assess OB is the Occupational Balance Questionnaire 11 (OBQ11), which measures the satisfaction with the variety and number of occupations. It consists of eleven items rated on a four-point scale, from 0 (‘strongly disagree’) to 3 (‘strongly agree’). It allows for analysis of both individual items and the total score, with higher scores indicating greater OB. The original version shows good reliability and validity (Håkansson et al., 2020). To ensure the OBQ-11 is used systematically, it’s important that professional guidelines and policies support its regular application in practice.

Importantly, several studies in the review indicated a positive relationship between OB and the presence of informal support (Dür et al., 2022; Kars et al., 2024). This suggests that strengthening caregivers’ social networks can have a direct, beneficial impact on their OB. OTs, therefore, play a important role in facilitating social connection and helping caregivers build or maintain meaningful support systems. For example, an OT can assist caregivers in finding an online support group that suits their needs and preferences. According to Clifford & Minnes (2013), caregivers of children with autism reported being satisfied with such support groups and stated that they received valuable help through their participation.

Another consistent finding was that an imbalance between obligatory activities and voluntary activities is the most commonly reported cause of poor OB in the OBQ11 (Günal et al., 2021; Yazici & Yildirim, 2025). To address this, therapists should support caregivers in achieving a more sustainable balance between these two types of occupations, enabling them to maintain both their caregiving role and personal well-being. This aligns with Christiansen & Matuska (2006) view that effective interventions must consider not only the types of occupations individuals engage in, but also the timing, sequencing, and daily rhythm in which they are performed.

In addition to this external balance, internal factors such as role satisfaction have also been identified as significant predictors of OB among caregivers (Dhas, 2023). This highlights the need that interventions should not only focus on external factors, but also address the caregiver’s internal experience of their role. OTs can support this by helping caregivers explore their values, expectations and perceived competence within their caregiving responsibilities. Using approaches such as motivational interviewing, can guide caregivers in identifying what is most important to them in their parenting role and how these values can be realistically expressed within their current life context. The effectiveness of motivational interviewing in parenting has been supported by a meta-analysis by Lundahl et al. (2013), which found significant improvements in health outcomes, underscoring its potential in OT interventions for caregivers.

Finally, access to healthcare is a critical system factor influencing the OB of caregivers (Dhas, 2023). These are areas where OTs can offer practical support, by helping caregivers navigate childcare resources and by promoting more effective collaboration with health care providers. In some contexts, OTs may also take on a coordinating role, helping to bridge communication between caregivers and other professionals, which can contribute to more integrated and responsive care (Robinson et al., 2016).

Study strengths & limitations

One of the key strengths of this scoping review is the collaborative and multidisciplinary nature of the research team. The selection process of the studies was conducted independently by two student researchers. Throughout the entire research process, including study selection, data analysis, and interpretation, close collaboration took place with three experienced researchers of different nationalities, all of whom have in-depth expertise in both the subject matter and the study design. One of these experienced researchers is also an OT affiliated with a private practice, bringing valuable practical expertise to the team. This diverse team composition significantly contributed to the scientific rigor and practical relevance of the study. Another notable strength of this study is the quality appraisal conducted using the JBI tools, which revealed that the included studies (N = 5) were of moderate to good methodological quality. Furthermore, the included studies involved a large number of participants (ranging from 69 to 280) (see table 1) and employed quantitative methodologies with statistical analyses such as the Mann–Whitney U test, chi-square tests and a regression analysis.

There are also limitations in this review. All the included studies employed a cross-sectional design, which may limit the variability and depth of the findings, as this type of design captures data at a single point in time and does not allow for insights into changes, developments or causal relationships. Furthermore, the planned focus group to validate the findings in practice couldn't be conducted due to time constraints within the research period. In addition, one of the included studies (Günal et al., 2021) focused specifically on mothers, while the remaining studies included both caregivers but mainly featured mothers. Similarly to other studies, there was an overrepresentation of mothers. In the included studies, this may have limited the generalizability of the findings to fathers, as the results predominantly reflect the experiences of mothers. Another limitation is that only English-language studies were included. Although Dutch, French, and German are official languages in Belgium. Finally, since three of the five included articles come from Turkey, the results cannot be automatically transposed to other social or geographical contexts. In countries like Turkey, mothers often stay at home to care for their children, while in many Western countries, women are also expected to participate in the workforce (Demir, 2021). This limits the general applicability and raises questions about the global representativeness of the findings.

Conclusion

This scoping review highlights the need for further research on the OB of caregivers of children with DHCC. This review revealed that caregivers of these children may experience an impact on their OB, scoring significantly lower compared to caregivers of a child without a DHCC. It’s the dynamic interaction between caregivers’ personal factors (including health and life satisfaction), occupational roles (including role balance and role satisfaction), and system factors (including access to healthcare, informal support and family quality of life) that may influence their OB.

This review identified also two major research gaps: the need for more in-depth qualitative and longitudinal research to better understand caregivers' lived experiences, and the necessity of achieving conceptual clarity around OB by caregivers of children within broader interdisciplinary contexts.

In terms of practice, the findings underscore the vital role OT can play in supporting not only children, but also their caregivers. Applying a multi-level approach, strengthening caregivers’ social networks, facilitating a balance between obligatory and voluntary activities, enhancing role satisfaction and supporting by the access to healthcare are possible strategies.

Acknowledgements

The authors wish to thank Dr. Hazel Killeen (University of Galway), Prof. Dr. Barbara Piskur (University Hasselt, REVAL research group and Zuyd University of Applied Sciences) and Dr. Marieke Coussens (University of Ghent) for their valuable contributions to this study.

Funding

This research didn’t receive any funding from agencies in the commercial, public or non-profit sector.

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Appendix

Appendix 1: Search terms

	Synonyms	Hypernyms	Hyponyms
Population: caregivers	"Parents"[Mesh] "Parent*"[Tiab] "Caregivers"[Mesh] "Caregiver*"[Tiab]	/	"Fathers"[Mesh] "Father*"[Tiab] "Mothers"[Mesh] "Mother*"[Tiab]
Exposure: having a child with a disability or health care condition	"Child"[Mesh] "Child*"[Tiab] AND "Disorder*"[Tiab] “Disabilit*"[Tiab]	AND "Health care condition"[Tiab]	"Disabled Children"[Mesh] "Disabled Child*"[Tiab] AND "Developmental Delay"[Tiab] "Neurodevelopmental Disorders"[Mesh] "Neurodevelopmental Disorder*"[Tiab] “Arthrogyposis”[Tiab] “Attention deficit hyperactivity disorder”[Tiab] "Attention Deficit Disorder with Hyperactivity"[Mesh] Autism spectrum disorder [Tiab] "Autism Spectrum Disorder"[Mesh]

			"Mental Disorders"[Mesh] "Mental Disorder*"[Tiab] “Behaviour disorder*"[Tiab] “Brachial plexus injury*"[Tiab] "Brain Injuries"[Mesh] "Brain Injur*"[Tiab] "Burns"[Mesh] "Burns"[Tiab] "Cerebral Palsy"[Mesh] "Cerebral Palsy"[Tiab] "Neoplasms"[Mesh] "Neoplasm*"[Tiab] "Cancer"[Tiab] "Chronic Pain"[Mesh] "Chronic Pain"[Tiab] "Motor Skills Disorders"[Mesh] "Motor Skills Disorder*"[Tiab] "Developmental Disabilities"[Mesh] Developmental Disabilit*"[Tiab] "Down Syndrome"[Mesh] "Down Syndrome"[Tiab] “Dysplasia"[Tiab]

			"Fetal Alcohol Spectrum Disorders"[Mesh] "Fetal Alcohol Spectrum Disorder*"[Mesh] "Learning Disabilities"[Mesh] "Learning Disabilit*"[Tiab] "Mental Health"[Mesh] "Mental Health"[Tiab] "Intellectual Disability"[Mesh] "Intellectual Disabilit*"[Tiab] "Pediatric Obesity"[Mesh] "Pediatric Obesit*"[Tiab] "Infant, Premature"[Mesh] "Infant, Premature"[Tiab] “Physical disabilit*"[Tiab] "Arthritis, Juvenile"[Mesh] "Arthritis, Juvenile"[Tiab] "Spinal Dysraphism"[Mesh] "Spinal Dysraphism"[Tiab]
Outcome: occupational balance	“Occupational balance"[Tiab] "Work-family Balance"[Tiab]	"Life Satisfaction"[Tiab]	"Occupational Performance"[Tiab]

Appendix 2: Search strings

Pubmed	("Parents"[Mesh] OR "Parent*"[Tiab] OR "Caregivers"[Mesh] OR "Caregiver*"[Tiab] OR "Fathers"[Mesh] OR "Father*"[Tiab] OR "Mothers"[Mesh] OR "Mother*"[Tiab]) AND (("Child"[Mesh] OR "Child*"[Tiab] OR "Disabled Children"[Mesh] OR "Disabled Child*"[Tiab]) AND ("Disorder*"[Tiab] OR “Disabilit*"[Tiab] OR "Health care condition"[Tiab] OR "Developmental Delay"[Tiab] OR "Neurodevelopmental Disorders"[Mesh] OR "Neurodevelopmental Disorder*"[Tiab] OR “Arthrogyposis”[Tiab] OR “Attention deficit hyperactivity disorder”[Tiab] OR "Attention Deficit Disorder with Hyperactivity"[Mesh] OR “Autism spectrum disorder [Tiab] OR "Autism Spectrum Disorder"[Mesh] OR "Mental Disorders"[Mesh] OR "Mental Disorder*"[Tiab] OR “Behaviour disorder*"[Tiab] OR “Brachial plexus injury*"[Tiab] OR "Brain Injuries"[Mesh] OR "Brain Injur*"[Tiab] OR "Burns"[Mesh] OR "Burns"[Tiab] OR "Cerebral Palsy"[Mesh] OR "Cerebral Palsy"[Tiab] OR "Neoplasms"[Mesh] OR "Neoplasm*"[Tiab] OR "Chronic Pain"[Mesh] OR "Chronic Pain"[Tiab] OR "Motor Skills Disorders"[Mesh] OR "Motor Skills Disorder*"[Tiab] OR "Developmental Disabilities"[Mesh] OR “ OR Developmental Disabilit*"[Tiab] OR "Down Syndrome"[Mesh] OR "Down Syndrome"[Tiab] OR "Dysplasia"[Tiab] OR "Fetal Alcohol Spectrum Disorders"[Mesh] OR "Fetal Alcohol Spectrum Disorder*"[Mesh] OR "Learning Disabilities"[Mesh] OR "Learning Disabilit*"[Tiab] OR "Mental Health"[Mesh] OR "Mental Health"[Tiab] OR "Intellectual Disability"[Mesh] OR "Intellectual Disabilit*"[Tiab] OR "Pediatric Obesity"[Mesh] OR "Pediatric Obesit*"[Tiab] OR "Infant, Premature"[Mesh] OR "Infant, Premature"[Tiab] OR “Physical disabilit*"[Tiab] OR "Arthritis, Juvenile"[Mesh] OR "Arthritis, Juvenile"[Tiab] OR "Spinal Dysraphism"[Mesh] OR "Spinal Dysraphism"[Tiab])) AND ("Occupational balance"[Tiab] OR "Work-family Balance"[Tiab] OR "Life Satisfaction"[Tiab] OR "Occupational Performance"[Tiab]) Pubmed (English, 2012 – 2025, 01/01/2012 – 25/02/2025): 436 results
Web of science (via	(ALL=Parents OR (TI=Parent* OR AB=Parent*) OR ALL=Caregivers OR (TI=Caregiver* OR AB=Caregiver*) OR ALL=Fathers OR (TI= Father* OR AB=Father*) OR ALL=Mothers OR (TI=Mother* OR AB=Mother*)) AND ((ALL=Child OR (TI=Child* OR AB=Child*) OR ALL="Disabled Children" OR (TI="Disabled Child*" OR AB="Disabled

clarivate analytics)	Child*")) AND ((TI=Disorder* OR AB=Disorder*) OR (TI=Disabilit* OR AB=Disabilit*) OR (TI="Health care condition" OR AB="Health care condition") OR (TI="Developmental Delay" OR AB="Developmental Delay") OR ALL="Neurodevelopmental Disorders" OR (TI="Neurodevelopmental Disorder*" OR AB="Neurodevelopmental Disorder*") OR (TI=Arthrogyposis OR AB=Arthrogyposis) OR (TI="Attention deficit hyperactivity disorder" OR AB="Attention deficit hyperactivity disorder") OR ALL="Attention Deficit Disorder with Hyperactivity" OR (TI="Autism spectrum disorder" OR AB="Autism spectrum disorder") OR ALL="Autism Spectrum Disorder" OR ALL="Mental Disorders" OR (TI="Mental Disorder*" OR AB="Mental Disorder*") OR (TI="Behaviour disorder*" OR AB="Behaviour disorder*") OR (TI="Brachial plexus injury*" OR AB="Brachial plexus injury*") OR ALL="Brain Injuries" OR (TI="Brain Injur*" OR AB="Brain Injur*") OR ALL=Burns OR (TI=Burns OR AB=Burns) OR ALL="Cerebral Palsy" OR (TI="Cerebral Palsy" OR AB="Cerebral Palsy") OR ALL=Neoplasms OR (TI=Neoplasm* OR AB=Neoplasm*) OR ALL="Chronic Pain" OR (TI="Chronic Pain" OR AB="Chronic Pain") OR ALL="Motor Skills Disorders" OR (TI="Motor Skills Disorder*" OR AB="Motor Skills Disorder*") OR ALL="Developmental Disabilities" OR (TI="Developmental Disabilit*" OR AB="Developmental Disabilit*") OR ALL="Down Syndrome" OR (TI="Down Syndrome" OR AB="Down Syndrome") OR ALL="Dysplasia" OR (TI="Dysplasia" OR AB="Dysplasia") OR ALL="Fetal Alcohol Spectrum Disorders" OR ALL="Fetal Alcohol Spectrum Disorder*" OR ALL="Learning Disabilities" OR (TI="Learning Disabilit*" OR AB="Learning Disabilit*") OR ALL="Mental Health" OR (TI="Mental Health" OR AB="Mental Health") OR ALL="Intellectual Disability" OR (TI="Intellectual Disabilit*" OR AB="Intellectual Disabilit*") OR ALL="Pediatric Obesity" OR (TI="Pediatric Obesit*" OR AB="Pediatric Obesit*") OR ALL="Infant, Premature" OR (TI="Infant, Premature" OR AB="Infant, Premature") OR (TI="Physical disabilit*" OR AB="Physical disabilit*") OR ALL="Arthritis, Juvenile" OR (TI="Arthritis, Juvenile" OR AB="Arthritis, Juvenile") OR ALL="Spinal Dysraphism" OR (TI="Spinal Dysraphism" OR AB="Spinal Dysraphism"))) AND ((TI="Occupational balance" OR AB="Occupational balance") OR (TI="Work-family Balance" OR AB="Work-family Balance") OR (TI="Life Satisfaction" OR AB="Life Satisfaction") OR (TI="Occupational Performance" OR AB="Occupational Performance"))

	Web of science (English, 2012 – 2025): 709 results
Scopus	(INDEXTERMS(Parents) OR TITLE-ABS(Parent*) OR INDEXTERMS(Caregivers) OR TITLE-ABS(Caregiver*) OR INDEXTERMS(Fathers) OR TITLE-ABS(Father*) OR INDEXTERMS(Mothers) OR TITLE-ABS(Mother*)) AND ((INDEXTERMS(Child) OR TITLE-ABS(Child*) OR INDEXTERMS("Disabled Children") OR TITLE-ABS("Disabled Child*")) AND (TITLE-ABS(Disorder*) OR TITLE-ABS(Disabilit*) OR TITLE-ABS("Health care condition") OR TITLE-ABS("Developmental Delay") OR INDEXTERMS("Neurodevelopmental Disorders") OR TITLE-ABS("Neurodevelopmental Disorder*") OR TITLE-ABS(Arthrogyposis) OR TITLE-ABS("Attention deficit hyperactivity disorder") OR INDEXTERMS("Attention Deficit Disorder with Hyperactivity") OR TITLE-ABS("Autism spectrum disorder") OR INDEXTERMS("Autism Spectrum Disorder") OR INDEXTERMS("Mental Disorders") OR TITLE-ABS("Mental Disorder*") OR TITLE-ABS("Behaviour disorder*") OR TITLE-ABS("Brachial plexus injury*") OR INDEXTERMS("Brain Injuries") OR TITLE-ABS("Brain Injur*") OR INDEXTERMS(Burns) OR TITLE-ABS(Burns) OR INDEXTERMS("Cerebral Palsy") OR TITLE-ABS("Cerebral Palsy") OR INDEXTERMS(Neoplasms) OR TITLE-ABS(Neoplasm*) OR INDEXTERMS("Chronic Pain") OR TITLE-ABS("Chronic Pain") OR INDEXTERMS("Motor Skills Disorders") OR TITLE-ABS("Motor Skills Disorder*") OR INDEXTERMS("Developmental Disabilities") OR TITLE-ABS("Developmental Disabilit*") OR INDEXTERMS("Down Syndrome") OR TITLE-ABS("Down Syndrome") OR TITLE-ABS(Dysplasia) OR INDEXTERMS("Fetal Alcohol Spectrum Disorders") OR INDEXTERMS("Fetal Alcohol Spectrum Disorder*") OR INDEXTERMS("Learning Disabilities") OR TITLE-ABS("Learning Disabilit*") OR INDEXTERMS("Mental Health") OR TITLE-ABS("Mental Health") OR INDEXTERMS("Intellectual Disability") OR TITLE-ABS("Intellectual Disabilit*") OR INDEXTERMS("Pediatric Obesity") OR TITLE-ABS("Pediatric Obesit*") OR INDEXTERMS("Infant, Premature") OR TITLE-ABS("Infant, Premature") OR TITLE-ABS("Physical disabilit*") OR INDEXTERMS("Arthritis, Juvenile") OR TITLE-ABS("Arthritis, Juvenile") OR INDEXTERMS("Spinal Dysraphism") OR TITLE-ABS("Spinal Dysraphism"))) AND (TITLE-ABS("Occupational balance") OR TITLE-ABS("Work-family Balance") OR TITLE-ABS("Life Satisfaction") OR TITLE-ABS("Occupational Performance")) Scopus (English, 2012-2025): 590 results

Appendix 3: Included studies

First author & year	Country & participants	Method	Aim	Outcome(s)	Main results	Quality
Günal et al., 2021	- Turkey - 33 mothers of children with CP and 36 mothers of TDC.	A cross-sectional group-comparison design	The goal is to show differences in OB and QoL between mothers of children with CP and TDC.	Occupational balance & Quality of life	Mothers of children with CP scored significantly lower ($p < 0.05$) on the total Occupational Balance Questionnaire-11 (OBQ11) score and the item "balance between obligatory and voluntary occupations". They also scored significantly lower ($p<0.05$) on the Nottingham Health Profile (NHP) for the items emotional reaction, social isolation and sleep. A moderately strong negative correlation ($p < 0.01$) was observed between the total OBQ11-T score and NHP scores, indicating that higher OB is associated with a better perceived QoL.	JBI analytical cross-sectional studies: include (see appendix 5)
Dhas et al., 2023	- Qatar - 89 Parents of children with disabilities (PCWD) and 89 parents of typically developing children (PTDC)	A cross-sectional group-comparison design	The main goal of the study was to compare OB in PCWD and PTDC. The secondary goals were to explore the connection	Occupational balance & family quality of life	PCWD score significantly lower (Cohen's $d = 0.36$) on the OBQ11 compared to PTDC. A statistically significant moderate correlation was found between OB and both total and global FQOL-2006 scores for PCWD ($r = .52$, $p = .001$ and $r = .57$, $p = .001$). Similarly, significant correlations were found between the OBQ11 and total ($r = .48$, $p = .001$) and global ($r = .31$, $p = .003$) FQOL-2006 scores for PTDC. Significant predictors ($p<0.05$) for	JBI analytical cross-sectional studies: include (see appendix 6)

	- More mothers (58%) than fathers (42%) participated		between OB and FQOL and to investigate how certain personal factors might predict OB.		OB include the presence of a child with a disability in the family, the number of children under five years old, spousal support, role satisfaction, satisfaction with healthcare and difficulty finding reliable childcare.	
Dür et al., 2022	- Austria - Six Austrian neonatal intensive care units - 270 parents, 168 (62%) were female. - 270 VLBW Infants, of which 120 (44%) were female. The mean gestational age of these infants was 27 weeks and 3 days (±2 weeks)	A cross-sectional multicenter study design	The main objective of this study was to investigate associations between parental OB, subjective health, and clinical characteristics of VLBW infants.	Occupational balance, subjective health & clinical characteristics	The study revealed significant associations between parental OB, subjective health, and clinical characteristics of VLBW infants, with Spearman's rank coefficients ranging from 0.13 to 0.56 ($p \leq 0.05$). Notably, the researchers identified specific correlations between different aspects of parental OB and bronchopulmonary dysplasia in VLBW infants. Occupational areas ($rs = 0.22$, $p \leq 0.01$), occupational characteristics ($rs = 0.17$, $p = 0.01$), and occupational resilience ($rs = 0.18$, $p \leq 0.01$) all showed significant correlations with this respiratory condition in the infants. Based on these findings, the researchers concluded that OB is associated with both parents' and VLBW infants' health, suggesting that interventions to enhance parental OB might positively impact both parental health and the health outcomes of their VLBW infants.	JBI analytical cross-sectional studies: include (see appendix 7)

Yazici & Yildirim, 2025	- Turkey - 280 participants, divided into two groups: 1) 140 parents of children with autism 2) 140 parents of TDC	A cross-sectional study	The primary aim of this study was to examine the OB and life satisfaction of parents of children with autism and typical development in Turkey.	Occupational balance & life satisfaction	The study revealed significant differences between parents of children with autism and parents of TDC. A substantial difference was found in the total score of the Turkish Occupational Balance Questionnaire-11 (OBQ11-T) and specifically in the scores of Items 4 and 9 ($p < 0.05$), indicating differences in OB between the two groups. Additionally, a significant discrepancy was observed in the total scores of the Contentment with Life Scale (CLAS), suggesting differences in life satisfaction. Interestingly, a strong positive correlation was found between the OBQ11-T and CLAS total scores in parents of children with autism ($r = 0.875$; $p < 0.001$), suggesting a close relationship between OB and life satisfaction in this group. These findings highlight the unique challenges faced by parents of children with autism and emphasize the importance of targeted strategies to enhance their OB and well-being.	JBI analytical cross-sectional studies: include (see appendix 8)
Kars et al., 2024	- Turkey - 138 parents (115 women & 23 men), who have pre-school aged children with	Cross-sectional study	Reveal the relationship between perceived social support, OB and the family functionality in	Perceived social support, Occupational Balance, family functionality	Parents perceived a moderate level of social support, particularly from significant others ($M = 5.00$), followed by family ($M = 4.91$) and friends ($M = 4.75$). Their OB was relatively low ($M = 1.46$), indicating that parents disagreed with statements suggesting they had a balanced occupational life. Regarding to family	JBI analytical cross-sectional studies: include (see appendix 9)

	autism enrolled in a rehabilitation program		rehabilitation in parents of children with autism.		functioning in the context of rehabilitation, parents reported high levels of awareness (M = 4.23), and moderate agreement with factors such as attitude and behaviour (M = 3.96), social participation (M = 3.97) and engagement in rehabilitation (M = 3.55). A significant positive relationship was found between perceived social support and OB (r = 0.62–0.70, p < 0.01). Furthermore, moderate positive correlations were observed between perceived social support (especially from friends and significant others) and several domains of family functioning (r = 0.42–0.55, p < 0.01). Family support showed a weaker but still significant relationship with awareness and behaviour-related aspects of family functioning. No significant association was found between social support and direct participation in rehabilitation.	

Appendix 4: Excluded studies

Author (year)	Reason of exclusion
Arzeen & Irhad (2021)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Çalışkan et al. (2021)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Balbo & Bolano (2023)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Naberushkina et al. (2024)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Ashworth et al. (2019)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Faden et al. (2023)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Çattık & Aksoy (2019)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Park & Kim (2019)	Wrong population: caregivers of individuals of all ages instead of caregivers of children.
Beheshti et al. (2022)	Wrong outcome: the perspective of caregivers on their child's occupational performance.
Ginevra et al. (2017)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Nilsson et al. (2023)	Wrong population: caregivers of children without a disability.
Wang et al. (2023)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Shaffer & Bagger (2014)	Wrong population: caregivers of individuals of all ages instead of caregivers of children
Ivaniševic et al. (2023)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Lučić et al. (2017)	Wrong outcome: the connection to OB is lacking, as the focus is predominantly psychological.
Davey et al. (2015)	Wrong population: the impact on the participation of the family as a whole, rather than just the caregivers
Parchomiuk (2022)	Wrong outcome: the connection to OB is lacking
Ranehov & Håkansson (2019)	Wrong outcome: the connection to OB is lacking
Kolacka et al. (2025)	Wrong outcome: the connection to OB is lacking
Hsieh & Lo (2013)	Wrong outcome: the connection to OB is lacking
Roiz & Figueiredo (2023)	Wrong outcome: the connection to OB is lacking
Peasgood et al. (2021)	Wrong outcome: the connection to OB is lacking
Behnia et al. (2017)	Wrong outcome: the connection to OB is lacking
Havaei et al. (2019)	Wrong outcome: the connection to OB is lacking
Davy et al. (2024)	Wrong outcome: the connection to OB is lacking
Bar et al. (2018)	Wrong outcome: the connection to OB is lacking

Appendix 5: JBI Critical appraisal checklist Günal et al., 2021

JBI Critical Appraisal Checklist for analytical cross sectional studies

Reviewer: Elke Meuleneire
Date: 07/03/2025
Author: Günal et al.
Year: 2021
Record Number: 10.1177/0308022621995112

	Yes	No	Unclear	Not applicable
1. Were the criteria for inclusion in the sample clearly defined?	☑	☐	☐	☐
2. Were the study subjects and the setting described in detail?	☑	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☑	☐	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	☑	☐	☐	☐
5. Were confounding factors identified?	☑	☑	☐	☐
6. Were strategies to deal with confounding factors stated?	☐	☑	☐	☐
7. Were the outcomes measured in a valid and reliable way?	☑	☐	☐	☐
8. Was appropriate statistical analysis used?	☑	☐	☐	☐

Overall appraisal: Include ☑ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion):
The study provides clear and well-defined inclusion and exclusion criteria. It specifically targeted mothers of children with CP from educational and rehabilitation centers, as well as mothers of typically developing children from a public university, with exclusion criteria based on important demographic and health-related factors. The study subjects and the setting were described in sufficient detail. A total of 33 mothers of children with CP and 36 mothers of typically developing children participated, with comprehensive demographic data provided for both the mothers and children.

Exposure and condition were measured using both researcher-developed forms and standardized criteria. Demographic data were collected via a custom form, while motor function in children with CP was assessed using the validated Gross Motor Function Classification System (GMFCS).

The outcomes were measured in a valid and reliable way. The use of the Occupational Balance Questionnaire-11 (OBQ11-T) and the Nottingham Health Profile (NHP) for assessing occupational balance and quality of life, respectively, is a strength. Both OBQ11-T and NHP have demonstrated strong psychometric properties, such as internal consistency and test-retest reliability, making them reliable instruments for the study.

While the study identified confounding factors, such as the severity of CP and the number of children, it didn’t provide explicit strategies to manage these confounders in the analysis, which represents a limitation. The potential impact of these unaccounted confounders could affect the interpretation of the results, but the lack of detailed strategies to handle them does not necessarily undermine the overall quality of the study.

Finally, appropriate statistical analysis was used. The use of nonparametric tests to account for non-normal data distribution, along with the application of correlation analysis (Spearman’s). The statistical methods were well-suited for the nature of the data and contributed to the validity of the study's conclusions.

In conclusion, despite the limitation regarding the management of confounding factors, the study meets the majority of the quality criteria and provides reliable, valid data for inclusion in the review.

Appendix 6: JBI Critical appraisal checklist Dhas et al., 2023

JBI Critical Appraisal Checklist for analytical cross sectional studies

Reviewer: Elke Meuleneire Date: 07/03/2025

Author: Dhas et al. Year: 2023 Record Number: 10.5014/ajot.2023.050076

	Yes	No	Unclear	Not applicable
1. Were the criteria for inclusion in the sample clearly defined?	☑	☐	☐	☐
2. Were the study subjects and the setting described in detail?	☑	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☑	☐	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	☐	☑	☐	☐
5. Were confounding factors identified?	☑	☐	☐	☐
6. Were strategies to deal with confounding factors stated?	☑	☐	☐	☐
7. Were the outcomes measured in a valid and reliable way?	☑	☐	☐	☐
8. Was appropriate statistical analysis used?	☑	☐	☐	☐

Overall appraisal: Include ☑ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion):

The study provides clear and well-defined inclusion and exclusion criteria. Parents with at least one child younger than 14 years were recruited, with specific criteria for both groups: PCWD and PTDC. Exclusion criteria were also outlined, particularly excluding professionals involved in direct clinical care from the PTDC group. The study subjects and the setting were described in sufficient detail. A total of 178 parents participated, with 89 PCWD and 89 PTDC. Comprehensive demographic data was provided, including information on participants' nationalities, languages spoken and the diagnoses of children with disabilities.

The exposure was measured in a valid and reliable manner using established methods, such as Likert scales for role satisfaction and spousal support. However, objective and standard criteria were not used to measure the condition.

The outcomes were measured in a valid and reliable way. The OBQ11 showed strong internal consistency and reliability. The Family Quality of Life was measured using a validated survey with good internal consistency. Appropriate statistical analyses were used, including chi-square tests, correlation, bivariate, and regression analyses, with necessary assumptions checked and a 5% significance level applied.

Confounding factors were identified, including the presence of a child with a disability, role satisfaction, and spousal support. The study used regression analysis that included several potential confounders. Additionally, the study examined demographic variables such as age, gender, education, employment status, nationality, income, and availability of paid help, which were compared between parents of PTDC and PCWD using chi-square analyses.

In conclusion, despite the limitation regarding objective, standard criteria for measurement of the condition, the study meets the majority of the quality criteria and provides reliable, valid data for inclusion in the review.

Appendix 7: JBI Critical appraisal checklist Dür et al., 2022

JBI Critical Appraisal Checklist for analytical cross sectional studies

Reviewer: Merel Vandewalle Date: 9 maart 2025

Author: Dür et al. Year: 2022 Record Number: 10.3389/fped.2022.816221

	Yes	No	Unclear	Not applicable
1. Were the criteria for inclusion in the sample clearly defined?	☑	☐	☐	☐
2. Were the study subjects and the setting described in detail?	☑	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☑	☐	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	☑	☐	☐	☐
5. Were confounding factors identified?	☑	☐	☐	☐
6. Were strategies to deal with confounding factors stated?	☑	☐	☐	☐
7. Were the outcomes measured in a valid and reliable way?	☑	☐	☐	☐
8. Was appropriate statistical analysis used?	☑	☐	☐	☐

Overall appraisal: Include ☑ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

The study included parents with sufficient German language skills and their preterm infants born < 37 weeks of gestation with a very low birthweight (<1,500 g). The study provided comprehensive information about the participants, including demographics, clinical characteristics, and the setting of six neonatal intensive care units in Austria.

The researchers used validated questionnaires to assess various aspects: occupational balance was measured using the Occupational Balance in Informal Caregivers (OBI-Care) questionnaire; subjective health was assessed with the Short-Form 36 Health Survey (SF-12); postnatal depression was evaluated using the Edinburgh Postnatal Depression Scale (EPDS); anxiety was measured with the State-Trait Anxiety Inventory (STAI); stress was assessed using the Parental-Stress-Index (EBI); and social support was measured with the social support questionnaire (F-SozU).

For infants, the study used established clinical criteria and scores such as the Apgar score at 5 minutes, Clinical Risk for Babies II Score (CRIB II), and clear definitions for complications of prematurity including bronchopulmonary dysplasia, necrotizing enterocolitis, and intraventricular hemorrhage.

The study acknowledged and addressed potential confounding factors, such as parental neuro-motor or psychiatric diseases and increased parental psychological burden, by excluding parents with these conditions based on evaluations by pediatricians and clinical psychologists.

For data analysis, the study employed suitable statistical methods, including descriptive statistics, Mann-Whitney U-tests for comparing groups, and Spearman's rank correlation coefficients to investigate associations between variables. This comprehensive approach to study design, data collection, and analysis contributes to the overall reliability and validity of the research.

Appendix 8: JBI Critical appraisal checklist Yazici & Yildirim, 2025

JBI Critical Appraisal Checklist for analytical cross sectional studies

Reviewer: Merel Vandewalle Date: 9 maart 2025

Author: Yazici & Yildirim Year: 2025 Record Number: 10.1111/cch.70047

	Yes	No	Unclear	Not applicable
1. Were the criteria for inclusion in the sample clearly defined?	[✓ ☐]	☐	☐	☐
2. Were the study subjects and the setting described in detail?	[✓ ☐]	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☐	[✓ ☐]	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	[✓ ☐]	☐	☐	☐
5. Were confounding factors identified?	[✓ ☐]	☐	☐	☐
6. Were strategies to deal with confounding factors stated?	[✓ ☐]	☐	☐	☐
7. Were the outcomes measured in a valid and reliable way?	[✓ ☐]	☐	☐	☐
8. Was appropriate statistical analysis used?	[✓ ☐]	☐	☐	☐

Overall appraisal: [✓ Include ☐] Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

The criteria for inclusion in the sample were clearly defined. Parents with at least one child under the age of 14 were selected based on predefined inclusion and exclusion criteria. For the autism group, parents needed to have at least one child diagnosed with autism. For the control group, parents needed to have at least one neurotypically developing child and no children with neurodevelopmental disorders in their family. Additional criteria included residing with their children for at least 1 month, being married, and able to read and understand Turkish.

The study subjects and setting were described in detail. The research included 140 parents of children with autism (PCWA group) and 140 parents of neurotypically developing children (PNDC group). Parents of children with autism were recruited from outpatient clinics in Istanbul, while parents of typically developing children were recruited through flyers and informal communication among nonclinical staff, family members, and relatives of these hospitals. Additionally, no details are provided about the diagnostic process, the criteria used, or the professionals involved in making the autism diagnosis.

Objective, standard criteria were used for measurement. The study employed validated instruments: the Turkish Occupational Balance Questionnaire-11 (OBQ11-T) to assess occupational balance and the Contentment with Life Scale (CLAS) to evaluate life satisfaction.

The study identified potential confounding factors such as age, employment status, and number of children, which were included in the regression analysis.

The study addressed confounding factors by including them in the multiple linear regression analysis. Age, employment status, and number of children were used as control variables in the model.

The outcomes were measured using valid and reliable instruments. The OBQ11-T and CLAS are both validated scales with reported reliability and validity in previous studies.

Appendix 9: JBI Critical appraisal checklist Kars et al., 2024

JBI Critical Appraisal Checklist for analytical cross sectional studies

Reviewer: Elke Meuleneire   Date: 15/04/2025

Author: Kars et al.   Year: 2024   Record Number: 10.1080/20473869.2024.2318863

	Yes	No	Unclear	Not applicable
1. Were the criteria for inclusion in the sample clearly defined?	☑	☐	☐	☐
2. Were the study subjects and the setting described in detail?	☑	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☑	☐	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	☑	☐	☐	☐
5. Were confounding factors identified?	☑	☐	☐	☐
6. Were strategies to deal with confounding factors stated?	☐	☑	☐	☐
7. Were the outcomes measured in a valid and reliable way?	☑	☐	☐	☐
8. Was appropriate statistical analysis used?	☑	☐	☐	☐

Overall appraisal: Include ☑   Exclude ☐   Seek further info ☐

Comments (Including reason for exclusion):

The study provides clear and well-defined inclusion and exclusion criteria. Participants were required to live in Turkey, be Turkish citizens, be literate in Turkish, have a preschool child with autism attending a rehabilitation program for at least one year and voluntarily agree to participate after being informed about the study. Exclusion criteria included conditions affecting social participation, such as physical, mental, or emotional disorders, and statuses like being a refugee or having a child with an additional diagnosis besides autism spectrum disorder. The study subjects and the setting were described in sufficient detail. A total of 138 Turkish parents of preschool-aged children with autism participated. Demographic data on the parents—such as age, gender, education level, and occupation—were provided, along with details about the children's age and gender.

Objective, standard criteria were used to confirm the condition and exposure, with the study relying on formal autism diagnoses based on American Psychiatric Association standards.

The study used established and validated instruments for measuring the outcomes, including the Multidimensional Scale of Perceived Social Support, the Occupational Balance Questionnaire, and the

Family Functioning Questionnaire in Rehabilitation, all of which demonstrated good internal consistency through Cronbach's alpha values.

Confounding factors were acknowledged, such as parental attitudes and behaviours that may influence outcomes. However, the study did not explicitly describe strategies to control for these confounders, and no statistical adjustments (e.g., regression analysis) were reported to mitigate their influence.

Appropriate statistical analyses were applied, including Pearson and Spearman correlation coefficients to assess relationships between key variables.

In conclusion, although the lack of clear strategies to manage confounding factors is a limitation, the study meets the majority of the JBI quality criteria. It demonstrates methodological rigor and provides valid and reliable data. Therefore, it is suitable for inclusion in the review.

Appendix 10: Use of ChatGPT

Use of ChatGPT (or any other AI writing assistance tool)

Form to be completed

Student names: Elke Meuleneire & Merel Vandewalle

Student numbers: 2469460 & 2468460

Please indicate with "X" whether it relates to a course assignment or to the master thesis:

O This form is related to a **course assignment**.

Course name: ....

Course number: ....

[✓ O] This form is related to **my Master thesis**.

Title Master thesis: Occupational balance among caregivers of children with disabilities or health care conditions: a scoping review study

Promotor: Prof. Dr. Barbara Piskur

Please indicate with "X":

O **I did not use** ChatGPT or any other AI writing assistance tool.

[✓ O] **I did use** AI Writing Assistance. In this case **specify which one** (e.g. ChatGPT/GPT4/...):

ChatGPT

Please indicate with "X" (possibly multiple times) in which way you were using it:

○ **Assistance purely with the language of the paper**

- *Code of conduct*: This use is similar to using a spelling checker

○ **As a search engine to learn on a particular topic**

- *Code of conduct*: This use is similar to e.g. a google search or checking Wikipedia. Be aware that the output of Chatbot evolves and may change over time.

○ **For literature search**

- *Code of conduct*: This use is comparable to e.g. a google scholar search. However, be aware that some AI writing assistance tools like ChatGPT may output no or wrong references. As a student you are responsible for further checking and verifying the absence or correctness of references.

○ **For short-form input assistance**

- *Code of conduct*: This use is similar to e.g. google docs powered by generative language models

○ **To let generate programming code**

- *Code of conduct*: Correctly mention the use of ChatGPT (or other AI writing assistance tool) and cite it. You can also ask ChatGPT how to cite it.

○ **To let generate new research ideas**

- *Code of conduct*: Further verify in this case whether the idea is novel or not. It is likely that it is related to existing work, which should be referenced then.

○ **To let generate blocks of text**

- *Code of conduct*: Inserting blocks of text without quotes from ChatGPT (or other AI writing assistance tool) to your report or thesis is not allowed. According to Article 84 of the exam regulations in evaluating your work one should be able to correctly judge on your own knowledge. In case it is really needed to insert a block of text from ChatGPT (or other AI writing assistance tool), mention it as a citation by using quotes. But this should be kept to an absolute minimum.

○ **Other**

- *Code of conduct*: Contact the professor of the course or the promotor of the thesis. Inform also the program director. Motivate how you comply with Article 84 of the exam regulations. Explain the use and the added value of ChatGPT or other AI tool: ….